

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Before the Board of Patent Appeals and Interferences

Applicant : BORDES, Philippe et al.
Serial No. : 10/522,118
Filed : January 24, 2005
For : METHOD OF DISTRIBUTING ENCRYPTED PORTIONS OF AN
AUDIOVISUAL PROGRAMME
Examiner : SCHWARTZ, Darren B.
Art Unit : 2435

APPEAL BRIEF

May It Please The Honorable Board:

This is Appellants' Brief on Appeal from the final rejection of claims 1-3 and 5.
Please charge the \$540.00 fee for filing this Brief to Deposit Account No. 07-0832.
Appellants waive an Oral Hearing for this appeal.

Please charge any additional fee or credit overpayment to the above-indicated
Deposit Account. Enclosed is a single copy of the Brief.

I. REAL PARTY IN INTEREST

The real party in interest of Application Serial No. 10/522,118 is the Assignee of record:

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II. RELATED APPEALS AND INTERFERENCES

There are currently, and have been, no related Appeals or Interferences regarding Application Serial No. 10/522,118 known to the undersigned attorney.

III. STATUS OF THE CLAIMS

Claims 1-3 and 5 are rejected, and the rejection of claims 1-3 and 5 is appealed.

IV. STATUS OF AMENDMENTS

All amendments were entered and are reflected in the claims included in Appendix I.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 1 claims a method of distributing encrypted portions of an audiovisual program to user terminals comprising, successive portions of the program are encrypted with the aid of different keys, wherein, on initiation, from a user terminal, of a telephone communication with a call centre, comprising the steps of:

transmitting said encrypted portions of an audiovisual program using at least one of: cable transmission, satellite transmission and over the airwaves transmission; (page 3, lines 4 – 10, page 5, lines 4 - 12, and Fig. 1)

transmitting in sequence from said call center and during the telephone communication the keys to the user terminal over said telephone communication, said keys are used for descrambling said audiovisual program, where said telephone transmission of said keys is performed in a manner synchronized with the distribution of the successive encrypted portions of the program and said telephone communication is over a telephone path, which is separate from said at least one of cable transmission, satellite transmission and over the airwaves transmission; and (page 3, lines 4 - 10, page 4, lines 3 – 14, and Fig. 1)

upon completion of the telephone communication with a user terminal, duration of telephone communication is determined in said call center as to draw up a bill corresponding to the reception of the program by the user terminal. (page 3, lines 11 – 15, page 3, line 26 to page 4, line 2)

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The Examiner has rejected claims 1-3 and 5 under 35 U.S.C. 103(a) as being unpatentable over Saito (U.S. Patent No. 5,504,933 A), in view of Mason (U.S. Patent No. 4,736,422 A), in further view of Korpela (U.S. Patent No. 6,311,054).

VII. ARGUMENT

Rejection of Claims 1-3 and 5 under 35 U.S.C. 103(a) as being unpatentable over Saito, in view of Mason, in further view of Korpela.

CLAIMS 1-3 and 5

The invention, as recited in claims 1-3 and 5, is objected to as being unpatentable over Saito, in view of Mason, in further view of Korpela. In the present case, the Examiner has failed to show that Saito, Mason, or Korpela, teach or suggest all of the limitations of independent claim 1.

The present claims describe a method of distributing an encrypted program wherein the encrypted program data is distributed over cable, satellite, or the airwaves, but the keys to descramble the program are distributed over a separate telephone communications path. Billing for the program is then based upon the length of time the telephone communication was engaged, which represents the amount of time the synchronized descrambling keys were available to the viewer. None of Saito, Mason, or Korpela, alone or in combination, disclose a method where descrambling keys are sent over one communications path synchronized with encrypted program content sent over another communications path, or where the time a telephone-based communication of descrambling keys is used to bill for viewing of encrypted content sent over another communications means.

Specifically, it is respectfully asserted that none of Saito, Mason, or Korpela, alone or in combination, disclose the steps of:

“transmitting in sequence from said call center and during the telephone communication the keys to the user terminal over said telephone communication, said keys are used for descrambling said audiovisual program, where said telephone transmission of said keys is performed in a manner synchronized with the distribution of the successive encrypted portions of the program and said telephone communication is over a telephone path, which is separate from said at least one of cable transmission, satellite transmission and over the airwaves transmission,”

or:

“upon completion of the telephone communication with a user terminal, duration of telephone communication is determined in said call center as to draw up a bill corresponding to the reception of the program by the user terminal,”

as described in independent claim 1.

In Saito, a system “for the so-called ‘pay-per-program’ is provided for viewing individual program on pay basis without signing a comprehensive contract. In response to a request for viewing a pay program executed via public telephone line from an applicant for viewing, a charging center sends a viewing permit code for viewing a pay program to a data communication device and collects a fee for the pay program. Upon receipt of the viewing permit code, a receiving device offers the pay program according to the viewing permit code. The broadcasting program is scrambled by three modes of fixed, selective and change. The request for viewing is executed in three modes by specifying time, program number and temporary number. As the viewing permit code, one of three modes is adopted: decode data, non-opened program number or decode data number.” (Saito Abstract)

As admitted in the Office Action, “Saito does not expressly disclose transmitting in sequence from said call center and during the telephone communication the keys to the user terminal over said telephone communication, said keys are used for descrambling said audiovisual program, where said telephone transmission of said keys is performed in a manner synchronized with the distribution of the successive encrypted portions of the program.” (Office Action, page 5) Thus, Saito fails to disclose the step of “transmitting in sequence from said call center and during the telephone communication the keys to the user terminal over said telephone communication, said keys are used for descrambling said audiovisual program, where said telephone transmission of said keys is performed in a manner synchronized with the distribution of the successive encrypted portions of the program and said telephone communication is over a telephone path, which is separate from said at least one of cable transmission, satellite transmission and over the airwaves transmission,” as described in independent claim 1.

As also admitted in the Office Action, “the combination of Saito and Mason do not explicitly teach: upon completion of the telephone communication with a user terminal, duration of telephone communication is determined in said call center as to draw up a bill corresponding to the reception of the program by the user terminal.” (Office Action, page 6) Thus, Saito also fails to disclose the step of “upon completion of the telephone communication with a user terminal, duration of telephone communication is determined in said call center as to draw up a bill corresponding to the reception of the program by the user terminal,” as described in independent claim 1.

In Mason, "a conditional access system for transmitting and receiving scrambled television signals over-air includes means for addressing each of the receiving apparatus with an over-air signal whereby to permit reception and descrambling of the signal. The transmitter is provided with means for assembling a cipher block of information including a first key for use in descrambling the television signal and information relating to a plurality of users, and means for encyphering the cipher block with a second key which is common to the plurality of users. On reception a receiver applies the second, common keys to the received cipher block, recovers the first key for use in descrambling the signal and the information relating to the respective user and descrambles the television signal. Further, it is proposed to transmit a further key in encrypted form and to use the first key to decrypt the further key which is then used to descramble the television signal. This provides a three level key system which is very secure but by using a common second key for a plurality of users, the time to access each user is short." (Mason Abstract)

The Examiner asserts, "Mason teaches transmitting in sequence from said call center and during the telephone communication the keys to the user terminal over said telephone communication (Figure 1; col 2, lines 26-37)..." Applicant respectfully disagrees.

The cited portion of Mason states:

"The only way to avoid this problem is to change this key, which we call the session key (S), at very frequent intervals. The session key (S) is also known in other references as the central word (CW) or the initialisation word (I) or indeed the service key (S). The session key interval may be of the order of one to ten seconds to avoid long access times when different channels are selected. Clearly the only

way to send a new session key, that changes every few seconds, is with the broadcast signal. The session key is not sent with the television signal in the clear-it is encrypted with another key that is stored in the receiver.” (Mason, column 2, lines 26-37)

There is no disclosure in this or other sections of Mason of transmitting descrambling keys over telephone communication. Furthermore, there is no disclosure of sending keys over a different communication means than the encrypted program content, as is specified in the present claims. Quite to the contrary, Mason states that “[c]learly the only way to send a new session key, that changes every few seconds, is with the broadcast signal.” A key aspect of the present invention is that descrambling keys are *not* sent with the broadcast signal. Thus, Mason, like Saito, fails to disclose the step of, “transmitting in sequence from said call center and during the telephone communication the keys to the user terminal over said telephone communication, said keys are used for descrambling said audiovisual program, where said telephone transmission of said keys is performed in a manner synchronized with the distribution of the successive encrypted portions of the program and said telephone communication is over a telephone path, which is separate from said at least one of cable transmission, satellite transmission and over the airwaves transmission,” as described in independent claim 1.

Furthermore, as admitted in the Office Action, “the combination of Saito and Mason do not explicitly teach: upon completion of the telephone communication with a user terminal, duration of telephone communication is determined in said call center as to draw up a bill corresponding to the reception of the program by the user terminal.” (Office Action, page 6) Thus, Mason also fails to disclose the step of “upon completion of the telephone communication with a user terminal, duration of telephone communication is

determined in said call center as to draw up a bill corresponding to the reception of the program by the user terminal,” as described in independent claim 1.

Korpela teaches a method and system “to determine charging information in a mobile communications system comprising one or more mobile stations and a mobile telecommunications network wherein the system collects information about the transferred amount of data in a mobile station or in the mobile telecommunications network, which collection can be made separately concerning the transmitted and/or the received data and along with information about the call duration determined in a mobile station. The collection may also include the bearer type and the symmetry of the connection. The transferred data is classified, and the charging information is stored relating to each call or to each class. The information can be displayed to the user on the display of the mobile station.” (Korpela Abstract)

Korpela does not disclose, nor does the Examiner assert that it discloses, sending descrambling keys over one communication medium synchronized with encrypted program content sent over another medium. Thus, Korpela fails to disclose the step of “transmitting in sequence from said call center and during the telephone communication the keys to the user terminal over said telephone communication, said keys are used for descrambling said audiovisual program, where said telephone transmission of said keys is performed in a manner synchronized with the distribution of the successive encrypted portions of the program and said telephone communication is over a telephone path, which is separate from said at least one of cable transmission, satellite transmission and over the airwaves transmission,” as described in independent claim 1.

The Examiner asserts “Korpela teaches upon completion of the telephone communication with a user terminal (col 1, lines 61-62; Figure 1, particularly element 5), duration of telephone communication is determined in said call center (col 3, lines 19-38) as to draw up a bill corresponding to the reception of the program by the user terminal (col 1, lines 10-15; col 1, lines 31-37; col 7, lines 34-40).” (Office Action, pages 6-7) While this may be correct, Applicant respectfully disagrees that it represents a limitation of the presented claims.

Korpela is describing using the length of a call, or a quantity of data transferred over a call, to determine a bill for the call itself. In contrast, in the present claims, the billing is for the reception of the encrypted content transmitted over a separate path, such as cable, satellite or over-the-air transmission. The bill in Korpela would be for the telephone connection, not for reception of the program, which would be a different charge and possibly a charge from a different provider. Thus, Korpela also fails to disclose the step of “upon completion of the telephone communication with a user terminal, duration of telephone communication is determined in said call center as to draw up a bill corresponding to the reception of the program by the user terminal,” as described in independent claim 1.

In view of the above remarks, it is respectfully submitted that there is no 35 USC 112 enabling disclosure provided by Saito, Mason or Korpela, alone or in combination, that makes the present invention as claimed in claim 1 unpatentable. Since dependent claims 2, 3, and 5 are dependent from allowable independent claim 1, it is submitted that they too are allowable for at least the same reasons that independent claim 1 is allowable.

VIII CONCLUSION

Saito, Mason and Korpela, fail to teach or disclose all of the limitations of the independent claims. Specifically, Saito, Mason and Korpela, alone or in combination, fail to disclose either the step of “transmitting in sequence from said call center and during the telephone communication the keys to the user terminal over said telephone communication, said keys are used for descrambling said audiovisual program, where said telephone transmission of said keys is performed in a manner synchronized with the distribution of the successive encrypted portions of the program and said telephone communication is over a telephone path, which is separate from said at least one of cable transmission, satellite transmission and over the airwaves transmission,” or “upon completion of the telephone communication with a user terminal, duration of telephone communication is determined in said call center as to draw up a bill corresponding to the reception of the program by the user terminal,” as described in the present claims. Accordingly, it is respectfully submitted that the rejection of Claims 1-3 and 5 should be reversed.

Respectfully submitted,
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APPENDIX 1 - APPEALED CLAIMS

1. (Previously Presented) A method of distributing encrypted portions of an audiovisual program to user terminals comprising, successive portions of the program are encrypted with the aid of different keys, wherein, on initiation, from a user terminal, of a telephone communication with a call centre, comprising the steps of:

transmitting said encrypted portions of an audiovisual program using at least one of: cable transmission, satellite transmission and over the airwaves transmission;

transmitting in sequence from said call center and during the telephone communication the keys to the user terminal over said telephone communication, said keys are used for descrambling said audiovisual program, where said telephone transmission of said keys is performed in a manner synchronized with the distribution of the successive encrypted portions of the program and said telephone communication is over a telephone path, which is separate from said at least one of cable transmission, satellite transmission and over the airwaves transmission; and

upon completion of the telephone communication with a user terminal, duration of telephone communication is determined in said call center as to draw up a bill corresponding to the reception of the program by the user terminal.

2. (Previously Presented) The method according to Claim 1, in which the telephone communication utilizes an Internet protocol.

3. (Previously Presented) The method according to Claim 1, in which synchronization time codes are transmitted with the keys to the user terminal.

4. (Cancelled)

5. (Previously Presented) The method according to Claim 1, in which the call centre is a centre for receiving telephone calls of a telephone operator.

6 – 12. (Cancelled)

APPENDIX II - EVIDENCE

None.

APPENDIX III - RELATED PROCEEDINGS

None.